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Quicksand or Bedrock for Behavioral Economics? Assessing Foundational Empirical Questions

Victor Stango, Joanne Yoong, and Jonathan Zinman *

Questions about whether individuals and households adequately save, and adequately manage those savings, are more salient than ever before with the advent of 401(k) plans and the general trend toward defined contributions rather than defined benefits.

Over the last few decades, research at the intersection of economics and psychology has documented and modeled a rich taxonomy of "behavioral factors" — deviations from the classical economic specifications of preferences, decision-making rules, and beliefs — that may help explain a wide variety of economic decisions and outcomes, including but not limited to wealth accumulation, savings, and financial well-being in retirement (For a comprehensive discussion see the PIs' working paper.) Insights from this research have started to become important inputs for economists, policymakers, and financial service providers interested in fostering the long-term financial health of those preparing for and entering retirement.

That said, there are two important gaps in what we know about behavioral factors, retirement planning, and long-term financial well being. First, how widespread is "being behavioral" — do relatively few or many people make decisions that deviate from classical economic norms? And which behavioral factors are most prevalent? Prior work has often measured one or a few such factors, and/or elicited them in nonrepresentative samples, such as college students, due to budget or time constraints.

A second and equally important gap in what we know is understanding links between "being behavioral" and retirement saving and wealth accumulation, as well as individuals' self-assessed level of satisfaction with their retirement preparedness. How much do behavioral factors influence retirement planning and outcomes? Most extant empirical studies measure just one or a few factors due to budget or methodological constraints, but do not link a full set of factors to outcomes. Goda et al. (2015) is an important exception, and the paper

* ***Victor Stango*** *is an economics professor at University of California-Davis' Graduate School of Management.* ***Joanne Yoong*** *is a senior economist at the National University of Singapore.* ***Jonathan Zinman*** *is an economics professor at Dartmouth College. This research brief is based on MRRC Working Paper 2018-378.*

most similar to what the PIs propose in examining the prevalence and predictive power of multiple behavioral factors in national samples. They do so for a much smaller number of behavioral factors. Tanaka et al. (2010) do lab-style elicitations for estimating loss aversion, present-bias, and probability-weighting for 181 Vietnamese villagers, and link those elicitations to survey data (on income, etc.), but they consider each behavioral factor independently.

We provide new evidence on these questions for 16 behavioral factors (B-factors). One set of B-factors relates to preferences: present-biased discounting, loss aversion, preference for certainty, ambiguity aversion, and choice inconsistency. Other B-factors capture biased beliefs, biased perceptions, and behavioral decision rules, among other factors. We implement our elicitations as part of six online survey modules administered to a nationally representative U.S. sample of 1400+ participants in RAND's American Life Panel (ALP) in 2014-15 and 2017.

In terms of our key results, we find that most B-factors are indeed quite prevalent, with some deviation from the "classical norm" exhibited by at least 50 percent of the sample for 11 of the 16 B-factors. Our main takeaways on the first question are that B-factors are widespread enough in the general population to motivate continued scrutiny, and that our streamlined methods are useful for eliciting them.

Turning to the second question, we find that cross-sectional heterogeneity in B-factors does in fact correlate with outcomes, and that generally speaking, "being behavioral" reduces individual's self-assessed financial well-being, as well as their "hard" measurements of retirement preparedness, such as wealth and stock market participation. Our main takeaway here is that B-factors do have economically substantial links to long-run financial well-being.

In future work, we plan to ask whether there are common factors that drive "being behavioral," whether and how the use of financial advice mitigates the effects of being behavioral, or the links between behavioral factors and financial well being; and a series of other questions.

Beyond, there are many possibilities for exploiting the panel, multitopic architecture of the ALP to explore relationships between our behavioral variables, covariates, and outcomes in yet more domains. That work could include more detailed consideration of behavioral theories, including structural models, than we undertake in this paper. Pushing further to map links between the multitude of behavioral factors and outcomes will improve understanding about consumer choice, market functioning, and policy design across the many domains in which behavioral economics has taken hold — energy, household finance, labor, health, and others.

University of Michigan Retirement Research Center
Institute for Social Research 426 Thompson Street Room 3026
Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180
mrrcumich@umich.edu www.mrrc.isr.umich.edu

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